### Bureau of Indian Affairs Fire Occurrence Reporting System – User's Guide

**APPENDIX H: Criteria for Firefighting Resource Types** 

## **Tractor-Plows**

	Minimum Standards for Type					
Component	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6
Horsepower	165	140	120	90	70-80	42-60
Examples	D-7 JD-850 TD-20 and larger	D-6 JD-750 TD-15 Case 1450	D-5H, D-4H TD-12 Case 1150	D-4, D-5C JD-650 TD-9	D-4C JD-450 TD-8	D-3 JD-400, JD-350 TD-7

#### **Dozers**

	Minimum Standards for Type				
Component	<b>Type 1</b> (Heavy)	<b>Type 3</b> (Light)			
Horsepower	200	100	50		
Examples	D-8H, D-7H JD-850	D-5H JD-650	D-46, D-3 JD-550		

**Engines** 

g	Minimum Standards for Type						
	Structure	e Engines	Wildland Engines				
Component	<b>Type 1</b> (Heavy)	<b>Type 2</b> (Heavy)	<b>Type 3</b> (Heavy)	Type 4 (Medium)	Type 5 (Medium)	<b>Type 6</b> (Light)	<b>Type 7</b> (Light/Slip-on)
Pump Rating Minimum flow (GPM) At rated pressure (PSI)	1000+ 150	250+ 150	150 250	50 100	50 100	30 100	10 100
Tank Capacity (gallons)	400+	400+	500+	750+	400-750	150-400	50-200
Hose, 2½" (feet)	1200	1000					
Hose, 1½" (feet)	400	500	500	300	300	300	
Hose, 1" (feet)			500	300	300	300	200
Ladders (feet)	48	48					
Master Stream (GPM)	500						-
Personnel (minimum)	4	3	3	2	2	2	2

### Watertenders

	Minimum Standards for Type			
Component	Type 1	Type 2	Type 3	
Tank Capacity (gallons)	5000+	2500+	1000+	
Pump Capacity (GPM)*	300+	200+	200+	
Off Load Capacity (GPM)	300+	200+	200+	
Max. Refill Time (minutes)	30	20	15	
	Notes: * Portable pump acceptable.			

#### **Air Tankers**

	Minimum Standards for Type			
Component	Type 1 (Heavy)	<b>Type 2</b> (Heavy)	Type 3 (Mixed)	Type 4 (SEAT)
Tank Capacity (gallons)	3000	1800	800	100
Examples	C-130 P-3 DC-7	DC-4 SP2H P2V	Grumman S-2 CL-215 CL-415 AT-802F	Thrush S-2R Melex M-18 AT-802

# Helicopters

	Minimum (unless otherwise noted) Standards for Type			
Component	Type 1 (Heavy)	Type 2 (Medium)	Type 3 (Light)	
Allowable Payload at 59°F at Sea Level (lbs)	Payload at 59°F 5000 2500		1200	
Passenger Seats	15+	9-14	4-8	
Retardant or Water Carrying Capability 700 (gallons)		300	100	
Maximum Gross Takeoff/Landing Weight (lbs)	12,501+	6000-12,500	Up to 6000	
B-214 series S-58/61/62/64/70 CH-54, UH-60 BV-107/234 SA-330J, AS-332 K-Max, H-43F		B-204/205/210/212 MD-900 S-55	B-206 series/407 MD-500 SA-315/316 AS-350 series/355 EC-135	
Helitanker	- Fixed Tank - Air Tanker Board Certified - 1100 gal. Minimum Capaci	ty		

#### **Handcrews**

	Minimum Standards for Type				
Component	Type I <sup>1</sup>	Type II with IA Capability	Type II	Type III	
Fireline Capability	Initial attack/can be broken up into squads, fireline construction, complex firing operations (backfire)	Initial attack/can be broken up into squads, fireline construction, firing to include burnout	Initial attack, fireline construction, firing to include burnout	Fireline construction, fireline improvement, mop-up and rehab	
Crew Size	18-20	18-20	18-20	18-20	
Leadership Qualifications	Permanent Supervision 1 Superintendent: TFLD, ICT4 1 Asst Supt: STCR, ICT4 3 Squad Boss: CRWB(T), ICT5	1 CRWB and 3 ICT5	1 CRWB and 3 FFTR1	1 CRWB and 3 FFTR1	
Bilingual Requirement	CRWB and FFT1's must be bilingual (able to read and interpret) in the primary language of crew.	CRWB and FFT1's must be bilingual (able to read and interpret) in the primary language of crew.	CRWB and FFT1's must be bilingual (able to read and interpret) in the primary language of crew.	CRWB and FFT1's must be bilingual (able to read and interpret) in the primary language of crew.	
Experience	80% - 1 season or more	60% - 1 season or more	40% - 1 season or more	20% - 1 season or more	
Full Time Organized Crew	Yes	No	No	No	
Communications	5 programmable radios	4 programmable radios	4 programmable radios	4 programmable radios	
Sawyers	3 agency qualified	3 agency qualified	0	0	
Training	80 hours annual training	Basic firefighter training and/or annual firefighter safety refresher	Basic firefighter training and/or annual firefighter safety refresher	Basic firefighter training and/or annual firefighter safety refresher	
Fitness	Arduous	Arduous	Arduous	Arduous	
Logistics	Self-sufficient	Not self-sufficient	Not self-sufficient	Not self-sufficient	
Maximum Weight	5100 lbs	5100 lbs	5100 lbs	5100 lbs	
Dispatch Availability	1 hour	Variable	Variable	Variable	
Production Factor	1.0	0.8	0.8	n/a	
Transportation	Own transportation	Transportation needed	Transportation needed	Transportation needed	

#### **Handcrews**

	Minimum Standards for Type				
Component	Type I <sup>1</sup>	Type II with IA Capability	Type II	Type III	
Tools & Equipment	Fully equipped	Not equipped	Not equipped	Not equipped	
Personal Gear	Arrives with: crew first aid kit, personal first aid kit, headlamp, 1 qt canteen, web gear, sleeping bag	Arrives with: crew first aid kit, personal first aid kit, headlamp, 1 qt canteen, web gear, sleeping bag	Arrives with: crew first aid kit, personal first aid kit, headlamp, 1 qt canteen, web gear, sleeping bag	Arrives with: crew first aid kit, personal first aid kit, headlamp, 1 qt canteen, web gear, sleeping bag	
PPE	Arrives with: hard hat, fire resistant shirt/pants, 8" leather boots, leather gloves, fire shelter, hearing/eye protection	Arrives with: hard hat, fire resistant shirt/pants, 8" leather boots, leather gloves, fire shelter, hearing/eye protection	Arrives with: hard hat, fire resistant shirt/pants, 8" leather boots, leather gloves, fire shelter, hearing/eye protection	Arrives with: hard hat, fire resistant shirt/pants, 8" leather boots, leather gloves, fire shelter, hearing/eye protection	

#### Notes:

<sup>1</sup> Interagency Hotshot Crews (IHC) are a Type 1 crew that exceeds the Type 1 Standards as required by the National IHC Operations Guide (2001) in the following categories:

• Permanent Supervision with seven career appointments (Superintendent, Assistant Superintendent, 3 Squad Bosses)

• IHC's work and train as a unit 40 hours per week

• IHC's are a national resource